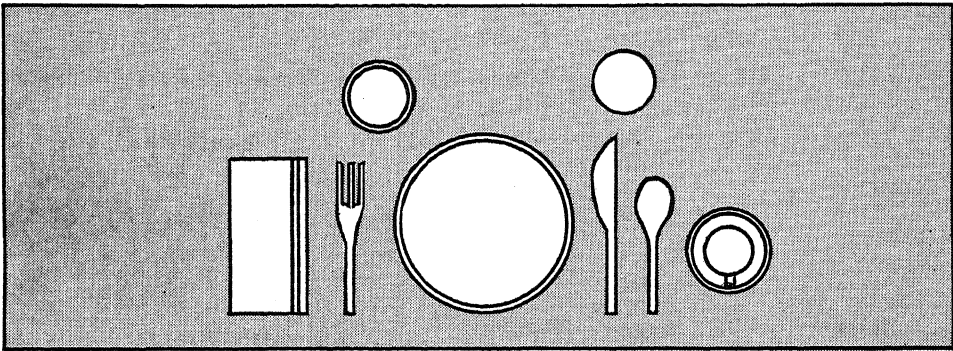


COMMUNITY MEAL MANAGEMENT



COOPERATIVE EXTENSION SERVICE
THE OHIO STATE UNIVERSITY



THE GIRLS

By Franklin Folger



"I'm very sorry to report that our charity supper failed to bring in any money. By the time the kitchen helpers finished tasting everything, there was nothing left to serve."

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COMMUNITY MEAL MANAGEMENT

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WHY COMMUNITY MEALS?

Community meals can contribute to the social life and unity of a group. Events, such as a church dinner, graduation party midnight supper, mother-daughter luncheon, bandboosters fund raising event, club banquet, or family night supper, encourage people to work together for a common goal.

Three major purposes of a community meal are:

Fellowship—family night suppers, club refreshments.

Service—contributing to the success of another event or project.

Profit—primarily to raise money for an organization.

It is well to determine in advance the goal(s) sought, since this will affect menu planning, method of serving, price, and other details relating to the meal.

GENERAL PLANNING

Tasty, nutritious, attractive meals, well prepared and nicely served on time, do not just happen. Much thinking and planning go into the project to make it progress smoothly. If plans have been made well, workers will enjoy the meal fully as much as the guests. Some of the essentials for success in a group meal are:

- * A good plan made well in advance
- * Cooperative committee workers who know and carry out their specific responsibilities
- * Dining room service appropriate for the occasion
- * Proper sanitation in the handling of food and in dishwashing
- * A financial result in keeping with the objectives of the function

ORGANIZATION

Planning should start well in advance—as much as a month or more ahead, depending on the size of the event. The key person in this planning is a general chairman, who is appointed or elected to the position. Committees should be set up to handle specific responsibilities; the chairman of

these committees should become a planning board to work with the general chairman. The number of committees will depend on the size and type of meal to be served. Usually three basic committees are needed—preparation, service, and clean-up. Other committees might be tickets, publicity, hostess, and decoration. This planning group will direct the entire event.

The **Planning Board**, with the general chairman, determines plans and policies for the meal, such as theme, type of service, menu, price of tickets, number of workers needed, whether workers pay for meals, need for decorations, and all other general matters pertinent to the event. It appoints committees and determines committee responsibilities.

The **General Chairman** assumes the basic responsibility for the meal. To do the job well, she should:

- Have knowledge of good food
- Be a good organizer
- Be able to work well with others
- Know the abilities of others in the group
- Be able to delegate responsibility
- Be interested in the project and objective about it
- Have the time to “stay with” the project until finished

A detailed statement of the responsibilities of each committee should be made, so nothing is overlooked and everyone knows who is to do which things. Sample work plans for the basic committees are below and on page 5.

A detailed work schedule for committee members is desirable so work loads can be equitably planned and workers know what they are to do. Work is best divided so no one (except, perhaps, the chairman) need work more than 4 or 5 hours. A sample form for such a schedule is provided in the section on records to keep.

PREPARATION COMMITTEE

Chairman.....

Other members.....

Responsibilities of Committee:

1. Study menu and recipes provided by planning committee.
2. Divide the work evenly among committee members.
3. Prepare food and have it ready to serve at the appointed time.
4. Serve the food for the Service Committee to carry to the guests.
5. Store or dispose of leftovers.
6. Clean cooking and storage equipment including range, oven, and refrigerator.
7. Make written report of work and give to general chairman.

SERVICE COMMITTEE

Chairman.....

Other members.....

Responsibilities of Committee:

1. Study plan for type of service as decided upon by planning committee.
 2. Divide work evenly among workers. Be sure each one knows her duties.
 3. Provide table decorations, linens, and other appointments.
 4. Arrange chairs and tables in dining room; set the tables.
 5. Serve food to the guests.
 6. Remove dishes from tables between courses and after the meal; remove food to designated area.
 7. Clean dining room and leave it in order.
 8. Return any borrowed property.
 9. Make written report of work and give to general chairman.
-

CLEANUP COMMITTEE

Chairman.....

Other members.....

Responsibilities of Committee:

1. Provide space and equipment for clearing and stacking dishes brought from dining room.
 2. Scrape, rinse and stack soiled dishes and cooking utensils.
 3. Clean, sanitize, and put away all dishes and utensils.
 4. Clean work surfaces in kitchen, sweep floor and leave everything in order.
 5. Dispose of garbage and trash.
 6. Arrange for laundry of any wash cloths or towels used.
 7. Make written report and give to the general chairman.
-

THE MENU

Several basic factors must be considered when planning the menu for a community meal. Any one or several will affect the final choice of foods to be served.

Equipment and space available: if oven space is limited it will not be possible to roast meat, bake potatoes, and/or bake a dessert for the same meal; limited refrigerator space may determine the kind of salad to be used.

Labor and time: a few experienced people can manage a simple meal, but more help is needed for meals with several courses and more complicated foods. The more complex the menu, the more time needed in preparation.

Season: seasonally abundant foods are generally more economical to use; winter meals usually are heartier than summer meals, which may tend to feature cold plates and simpler foods.

Occasion: menus should be tailored to fit the group and the occasion, from the formal banquet to the family night supper.

Who is to be served: foods for children need to be simple and easily digested; women may prefer less hearty meals than men; young people enjoy simple foods in ample quantity.

Type of service: a successful buffet meal calls for foods that people can easily serve themselves; family style service requires foods that can be passed easily at the table.

Certain principles of good menu planning, if observed, help to assure an attractive, palatable meal:

Colors should be planned to provide contrast and emphasis—an all white meal is unappetizing in appearance.

Textures should contrast with and complement each other—raw vegetables in salads or relishes, crusty toppings on desserts, raw celery in chicken salad. These provide crisp accents with soft foods.

Flavors are combined to enhance each other. Examples are a sharply flavored garnish on a bland food, a spicy garnish on a meat plate, a sweet topping on a tart dessert, strong flavored vegetables with a mild main dish.

Shapes can be varied to make a plate appear more interesting; some items or ingredients may be diced, sliced, shredded, cut in strips, or used whole to make a contrast and variation in form.

Establishing a pattern for the types of meals usually served by a group helps in the menu making process. The pattern serves as an outline, with specific dishes incorporated at the time a meal is planned. This assures that no important part of the meal is accidentally omitted.

MEAL: BANQUET*

Pattern	Menu
Appetizer	Hot tomato bouillon
Meat	Roast turkey with dressing
	Giblet gravy
Potato (or substitute)	Mashed
Other vegetable	Buttered green peas with tiny onions
Salad	Molded fruit, in lettuce cups
	Assorted relishes
	Mayonnaise to pass
Bread	Hot dinner rolls, buttered
Dessert	Ice cream and sherbet (1 #20 scoop each)
Beverages	Water (placed on table ahead of meal)
	Coffee, tea, milk

* Suggested pattern for a banquet-style meal, with one possible menu.

A luncheon pattern and menu might include:

MEAL: LUNCHEON

Pattern	Menu
Meat or hot dish	Ham casserole supreme*
Vegetable	Whole green beans, buttered
Salad	Coleslaw
Bread	Hard rolls, butter
Dessert	Strawberries (fresh or frozen) and pineapple chunks
Beverages	Water (placed on table ahead of meal)
	Coffee, tea, milk

* Recipe in following section.

THE RECIPES

The use of standardized large quantity recipes is recommended when preparing food for 25 or more people. If a family-size recipe is selected, it is advisable to repeat the preparation several times rather than to multiply the recipe. Any inaccuracies which may exist in the small recipe would be exaggerated with the increased quantity. This is particularly true in baked products and those containing a thickening agent.

Recipes in reliable quantity cookbooks are designed for 50 or 100 portions. The question of whether to enlarge or repeat these recipes might depend on the size of the equipment to be used. It is usually difficult to divide them to much smaller recipes because of fractional measurements.

Large food and equipment companies maintain test kitchens where quantity recipes are developed. These may be obtained upon request, free of charge or for a small fee. National organizations, such as The Turkey Federation and The Processed Apple Institute, also publish reliable information regarding quantity food preparation. Also, local libraries and county Extension offices are possible sources of recipe information. A few basic recipes and a selected reference list of available books, bulletins, and leaflets are included in this bulletin. A card file of frequently used recipes is convenient for quick reference.

One important difference between family size and large quantity recipes is the way in which the yield is stated. Unless this is understood, it may be a hazard in planning the necessary quantities of food. **Family recipes** usually state that they will "serve 6" or "serve 8" people and these estimates are based on generous averages of what people may be expected to eat. **Quantity recipes** state the yield specifically: "Yield: 50 servings—approximately 1 cup per serving." This means that 50 people can be served from that recipe IF the servings are approximately 1 cup each, and IF only one serving per person is planned. If "seconds" are to be provided, or if the serving size is to be other than the one specified, allowances must be made when planning quantities to avoid running out of food or having excessive leftovers. Simple arithmetic will help to determine the amount of food needed for the number of people to be served, once the size of serving is determined.

Selected Recipes and Cooking Instructions

MEAT COOKERY—GENERAL

Meat may be cooked by “dry” or “moist” heat, or by “frying.” The choice of method depends largely on cut and quality. **Dry heat** (roasting or broiling) is used for tender cuts of good quality; **moist heat** (pot roast, stewing, braising) is used for meat with more connective tissue, because the steam acts as a tenderizer; **frying** is generally done on thinner cuts and in preparation for dishes using cooked meat.

In any case, low to moderate temperatures are recommended for meat cookery. Lower temperatures help to assure uniform cooking and moist, flavorful meat with maximum servings and easier slicing.

When meat is wrapped in aluminum foil for cooking, the moisture will be retained within the wrap, and the meat will not be roasted, but steamed. This changes the flavor of the meat. At the same time, the foil acts as an insulator, requiring higher oven temperatures (as much as 75° F) for cooking.

Roasting

Roasting is a dry heat method by which the meat is cooked in the oven, in an open pan, with no moisture added. Meat cuts must be tender to be roasted.

TIME TABLE FOR ROASTING MEAT

Cut	Weight in Pounds	Oven Temp.	Interior Temp. of Roast when Removed from Oven	Minutes per Pound	Total Cooking Time (hours)
Beef					
Standing rib (3 rib)	6-8	300	140—rare	18-20	2-3
			160—med.	22-25	2½-3
			170—well	27-30	3-4
Standing rib (7 rib)	23	300	125—rare	11	4
			140—med.	12	4½
			150—well	13	5
Rolled rib (7 rib)	17	300	150—well	24	6
Pork					
Loin	12-15	300	185	16	3-4
Rolled Shld.	4-6	350	185	35-40	3-3½
Ham					
Smoked whole	10-14	300	160	15-18	3-3½
Fresh ham, boned, split and tied in two rolls	10-12	350	185	30-35	5-7

Method:

1. Place roast, fat side up, on a rack in an open shallow pan.
2. To accurately determine doneness, cook with a meat thermometer inserted so the bulb is in the center of the largest muscle. Do not allow the bulb to rest on bone or fat.
3. Season with salt and pepper if desired.
4. Roast at a constant, low even temperature.
5. Turn boneless roasts or a very large roast once or twice during cooking.
6. Roast only to the desired degree of doneness.

The temperatures at which color changes take place in beef are considerably higher than the temperatures above suggested; however, large roasts continue cooking for some time after they are removed from the oven. Therefore, to prevent overcooking, roasts should be removed from the oven when the meat thermometer shows several degrees lower than the temperature at which the actual color change should take place.

BRAISING INSTRUCTIONS

Braising is one of the methods of cooking meat by moist heat. It is adaptable to the less tender meat dishes, such as pot roasts and Swiss steaks.

TIME TABLE FOR BRAISING MEAT

Cut	Average Weight or Thickness	Approximate Cooking Time
Pot Roast	5-15 lb	3-5 hr
Swiss Steak	1-2½ in.	2-3 hr
Short Ribs	Pieces 2 x 2 x 2 in	1½-2 hr
Pork Chops or Steaks	¾ to 1 in.	45 min to 1 hr

Method:

1. Season meat with salt and pepper and dredge with flour, if desired.
2. Brown meat on all sides in a small amount of fat.
3. Add a small amount of liquid such as water, meat stock, or tomato juice. This will increase tenderness and may be used as a sauce later.
4. Cover with a close-fitting lid and cook at low temperature, either in the oven or on the range.
5. Cook until tender, or until the meat thermometer registers 185 degrees.
6. Remove meat and make gravy.

ROAST TURKEY

Turkey may be roasted whole, in parts, or in boned, rolled form. Boned rolled roasts require less oven space for roasting and may be easier to portion and serve. Methods for roasting follow:

Whole Bird

1. Brush skin thoroughly with cooking fat. Rub inside cavity with mixture of salt, pepper, poultry seasoning and onion salt.

2. Place breast up on a flat rack (breast down in a V-rack), in a shallow baking pan. If a meat thermometer is used, insert so the bulb rests in the center of the inside thigh muscle adjoining the body cavity.
3. Roast in a preheated oven at 250° to 300° F (Low oven temperatures assure higher yields of edible meat than when higher temperatures are used).
4. The turkey is done when the meat thermometer registers 190° F. If no thermometer is used, test for doneness by moving the drumstick up and down. If the leg joint gives readily, the turkey is done.

NOTE: For quantity serving, it is recommended that turkeys be roasted without stuffing. A stuffed turkey requires additional roasting time and there is some danger of food poisoning, since stuffing may not be thoroughly heated during roasting.

TIME TABLE FOR ROASTING UNSTUFFED TURKEY

Weight of Turkey	Oven Temperature	Minutes per Pound	Cooking Time Hours per Bird
8-10 pounds	250	25-30	3-3½
10-14 pounds	250	18-20	3½-4
14-18 pounds	250	15-18	4-4½
20-30 pounds	250	12-15	5-6

Boneless Rolls

Roast-poaching is recommended by the Turkey Federation for boneless rolls.

1. Place roll in flat roasting pan.
2. Cook at moderate temperature, not to exceed 340° F. No water or fat need be added at this time.
3. Brown on one side, then turn. Add about ¼ inch of water in roasting pan.
4. Roast for 2 to 2½ hours, or until done. Use meat thermometer for best check for doneness, inserting to middle of roast in muscle.

NOTE: Turkey will carve or slice better if allowed to stand 20 to 30 minutes after removing from the over before cutting.

ENTREES

Baked Chicken Barbecue

Yield—52 servings

Size of serving—¼ of a fryer

Ingredients	Quantity
Frying chickens (about 2½ lb each), quartered	13
Butter or margarine	1½ lb
Onions, fresh sliced (3½ lb) or use	3 qt
1 lb dry sliced onions, reconstituted ½ hour	
Vinegar	1⅓ c
Worcestershire Sauce	1⅓ c
Red Pepper	1 tsp
Black Pepper	4 tsp
Chili Powder	8 tsp
Catsup	9 c
Water	9 c
Green Pepper, chopped	6 c (2½ lb)

Method:

Wash and dry chicken pieces. Refrigerate if they must be held for later cooking. Melt $\frac{3}{4}$ cup butter or margarine in each of 4 large baking pans, about 20 x 12 x 2 inches, in 400° F oven. Remove pans from oven. (May use 8 smaller pans, 13 x 9 x 2 inches) Place chicken in pans, turning to coat with butter. Arrange skin side down in a single layer. Bake at 400° for 30 minutes. Combine all remaining ingredients in large kettle and simmer for 30-40 minutes to make barbecue sauce. Turn chicken; pour sauce over chicken; bake about 30 minutes longer, until done. Serve with sauce. May be served hot or cold.

Baked Stuffed Pork Chops

Yield—48 servings

Size of serving—1 stuffed pork chop

Ingredients	Quantity
Brown sugar, firmly packed	1½ c ($\frac{3}{4}$ lb)
Cinnamon, ground	2 Tbsp
Salt	2 Tbsp
Celery salt	2 Tbsp
Bread crumbs, soft	2 gal (2 lb 10 oz)
Butter or margarine, melted	1½ lb
Applesauce, canned	2¼ qts (5 lb)
Pork chops, cut 3 per lb	16 lb (48 chops)

Method:

Blend brown sugar, cinnamon, salt, celery salt; add to soft crumbs. Add melted fat and 1½ quarts of applesauce to spiced crumbs. Place pork chops in 3 ungreased pans (12 x 20 x 2½ inches). Place $\frac{1}{4}$ cup (No. 16 scoop) of stuffing mixture on each chop. Top each mound of stuffing with 1 tablespoon of remaining applesauce. Bake at 350° F for 1 hour and 15 minutes.

VEGETABLES

Vegetables may be served with sauces, glazed, sweetened, or buttered. The choice will depend on other menu items and which foods go well together.

Seasonings for buttered vegetables might include:

- Chopped almonds, peanuts, or other nuts
- Chopped onion or parsley
- Herbs such as thyme, basil, mace
- Croutons, flavored or plain
- Slivered ripe olives

In general, vegetables are best steamed, or simmered in a small amount of salted water, until just tender. Cooking liquor may be drained and used for sauces, gravies, or soups for added flavor and excellent food value. Cook green vegetables (asparagus, cabbage, peas) in small quantities—not over 5 pounds in one container. Root vegetables can be cooked in larger quantities since they retain color and shape well. A 20-pound batch will require 1½ to 2 hours for heating the water and cooking the vegetable.

Canned vegetables are already cooked. They are best heated but not further cooked. They can be heated in the canning liquor, which can then be drained and used as above.

Frozen vegetables are preferred for some meals. The vegetables should be cooked just before serving to insure excellent flavor and color. General cooking method is as follows:

COOKING TIME FOR FROZEN VEGETABLES

Yield: 24 Servings — Size of Serving: ½ cup

Ingredients	Measure	Cooking time after veg. is added and wt. returns to a boil	Method
Water	1 qt		Bring water and salt to boil in large kettle (6 to 8 qt). Add veg., and bring again to a boil. Then boil slowly (simmer) covered until just tender — about as shown here. Drain if necessary—leave enough moisture to keep veg. plump and moist until served. Add butter or sauce as desired.
Salt	1 Tbsp		
Frozen veg.	5 lb		
peas		6 to 8 min	
beans, mixed veg.		8 to 10 min	
brussel sprouts		10 to 12 min	

NOTE Cook only 5 to 6 pounds of a frozen vegetable in one container at a time. In planning, allow up to 45 minutes for heating the water and cooking the vegetables.

BREADS

Assorted breads add much to a meal. Homemade breads and rolls are especially prized. Many of these can be solicited from members. Hot biscuits are best made on the spot and served very soon after baking. A basic mix may be made ahead, so preparation just ahead of serving time is minimized. Recipes for two such mixes follow, each in two sizes:

BISCUIT MIX

Ingredients	Amount for 100	Amount for 200
All-purpose flour	4 lb* (1 gal sifted)	8 lb
Nonfat dry milk	12 oz (3 c) [4½ c instant]	1½ lb
Baking powder	3 oz (½ c)	6 oz
Salt	1 oz (2 Tbsp)	2 oz (¼ c)
Shortening	1½ lb (3 c)	3 lb

* When baking in quantity, weighing ingredients is quicker and more accurate than measuring.

Method:

Sift dry ingredients together three times or blend 15 minutes in mixer on low speed, using the whip. Cut in shortening with hand or machine pastry blender. Store in tightly covered container in a cool place until needed. Amount for 100 servings weighs 6½ lb.

To use:

Add enough water to the dry mix to make a soft dough (about 1½ qt. water to 6½ lb. mix). Turn out on lightly floured board. Knead lightly about ½ minute. Roll out to desired thickness (½ inch for ordinary biscuits). Cut in squares or with 2-inch round cutter (cutting squares is a quick, more efficient method, and leaves no dough pieces which must be re-rolled). Bake at 425 degrees 12 to 15 minutes.

CORNBREAD MIX

Ingredients	Amount for 100	Amount for 200
All-purpose flour	3 lb (3 qt sifted)	6 lb (6 qt sifted)
Baking powder	4½ oz (¾ c)	9 oz (1½ c)
Sugar	10 oz (1¼ c)	1¼ lb (2½ c)
Salt	1½ oz (3 Tbsp)	3 oz (6 Tbsp)
Cornmeal	2½ lb (2 qt)	5 lb (4 qt)
Nonfat dry milk	10 oz (2½ c) [3¾ c instant]	1¼ lb (5 c)

Method:

Sift ingredients together 3 times or blend 5 minutes in mixer on low speed, using the whip. Store in a tightly covered container in a cool place until needed. Yield: 7 lbs. (1¼ gallons, 1½ cups).

CORNBREAD (using cornbread mix)

Ingredients	Amount for 100	Amount for 200
Cornbread mix	7 lb (5 qt + 1½ c)	14 lb (10 qt + 3 c)
Eggs	2 c (10)	4 c (20)
Water	2½ qt	5 qt
Melted fat or oil	1¼ lb (2½ c)	2½ lb (5 c)

Method:

Combine cornbread mix with remaining ingredients and mix just enough to moisten. Pour into well greased 20 x 12 x 2 inch pan, 1¾ qt or about 3 lb 10 oz per pan. Bake at 425 degrees F 30 to 40 minutes.

Portion: 1 piece, 2¼ x 4 inches.

Variation:

Cornmeal Muffins: Portion batter with a No. 16 scoop (¼ cup) into greased muffin pans. Bake at 425° 20 minutes.

BEVERAGES

Convenience products in this category include instant coffee, tea, and chocolate drink mixes. Consumer tests indicate these are as acceptable to diners as the more conventionally made products.

When making brewed coffee, use the method advised by the manufacturer of the coffeemaker, for best results. Amounts are given below. If coffee of less strength is desired, it is more satisfactory to add hot water to the finished coffee than to use less than the recommended measure of coffee. This can be done by having water available when coffee is served so those who wish may have a weaker brew. It is always possible to dilute strong coffee, but very little can be done to improve weak coffee.

INSTANT COFFEE

Ingredients	Amount for 25 5-oz cups	Amount for 75 5-oz cups	Amount for 125 5-oz cups
Instant coffee	2 oz jar (1 c)	6 oz jar (3 c)	10 oz jar (5 c)
Water	1 gal	3 gal	5 gal

Add boiling water to instant coffee and stir; cover and let steep a few minutes. DO NOT BOIL. Alternate method: cool water may be added to the instant coffee and brought to a simmer; do not boil. Serve piping hot.

BREWED COFFEE

5½-oz servings	Ground coffee*	Fresh cold water
50	1 lb	2½ gal
100	2 lb	5 gal

* When using part of a can of coffee, figure about 5½ cups per pound.

Picnic Style Coffee

Put 1 pound of coffee (regular grind) in a large cloth bag and tie so coffee has room to expand in the bag. Bring water to a boil in a large pot or kettle, drop in the bag of coffee, cover tightly, reduce heat, and simmer about 10 to 15 minutes. DO NOT BOIL. Plunge bag up and down several times, then remove. Keep coffee hot for serving. (Some prefer to use only 2 gallons of water for this method, making about 45 servings; others prefer the standard of 2½ gallons per pound of coffee.)

FROSTY SHERBET PUNCH

Ingredients	2½ gallons	5 gallons
Orange-grapefruit juice	3 46-oz cans	6 46-oz cans
Apricot nectar	3 12-oz cans	6 46-oz cans
Gingerale	3 qt	6 qt
Pineapple sherbet	3 qt	6 qt

Method:

Have juice and gingerale thoroughly chilled. Empty one can of each juice and one quart of gingerale in punch bowl. Add a quart of sherbet. Spoon the liquid over the sherbet, until partly melted. When supply runs low, repeat the above process.

NOTE: This is an excellent punch for garden parties, as it requires no ice.

HOT SPICED TEA

Ingredients	24 servings
Cloves, whole	1 tsp
Cinnamon, stick	2 sticks
Water	2 qt
Black tea	2½ Tbsp
Juice of oranges	3 oranges
Juice of lemons	1½ lemons
Sugar	1 c

Method:

Tie spices loosely in bag and bring to boiling in water. Add tea loosely tied in bag. Steep 5 minutes. Remove bags. Add heated juice and sugar to the hot tea.

DESSERTS

Dessert and coffee sometimes serve as a complete refreshment, before or after a meeting. As part of the meal, it must be planned in relation to the other foods served. A rich or heavy meal is best followed by a light, not too-sweet dessert—perhaps fruited gelatine with a thin custard sauce, baked apples, or fresh fruit and cheese. Pies, pastries, rich cakes, and puddings are better after a less-filling meal. Ice cream is popular with many kinds of meals and may be served alone or with other foods, depending on the occasion and how much food has preceded it.

APPLE CRISP

Yield: 100 portions — Portion size: approximately ½ cup

Ingredients	Quantity
Sliced pared apples	16 lb (3 gal + 2½ qt)
Lemon juice	⅓ c
Water	2 c
Brown sugar	6 lb (3 qt + 1¾ c packed)
Nonfat dry milk*	1 lb
All-purpose flour	1½ lb (1½ qt sifted)
Rolled oats	12 oz (3 c)
Cinnamon	2¾ Tbsp
Salt	2 tsp
Butter or margarine	2½ lb (1¼ qt)

* If using instant dry milk granules, 1 lb = 1½ quarts of granules.
If using powdered dry milk, 1 lb = 1 quart of powder.

Method:

Arrange apples in 4 greased pans (about 20 x 12 x 2 inches). Blend lemon juice and water; pour over apples. For the topping, combine sugar, dry milk, flour, oats, cinnamon, and salt. Cut in butter or margarine to form a crumbly mixture. Cover apples with topping and pat down firmly. Bake at 350° F 30 to 40 minutes or until apples are tender.

PORTION CONTROL

The use of standardized recipes contributes to portion control, but the servings must be of uniform size, if the yield of the recipe is to be dependable. The advantages of using portion controls are obvious: assurance of adequate and similar servings of food to each person from the amount provided, and control of costs. The style of service will determine how precise this control can be. If food is served on individual plates, all foods may be pre-portioned; if food is served "family style" a reasonable estimate of the size and number of portions the diners will take is the basis for planning.

To assure uniformity of servings, portioning tools and preportioned foods are available.

Portioning tools

Scoops: The identifying number on the scoop indicates how many level scoopfuls make one quart. (For serving food a rounded dip is generally used. Therefore, yields per quart will be less than the scoop number indicates.) The following table shows the level measure of some frequently used scoops in cups or tablespoons:

Scoop No.	Level Measure
6	$\frac{2}{3}$ c
8	$\frac{1}{2}$ c
10	$\frac{3}{5}$ c
12	$\frac{1}{3}$ c
16	$\frac{1}{4}$ c
20	$3\frac{1}{5}$ Tbsp
24	$2\frac{2}{3}$ Tbsp

Scoops are useful for such items as muffin batter; meat patties; sandwich fillings; some vegetables, salads and casserole dishes; and ice cream.

Ladles: recommended for serving soups, stews, creamed dishes, gravies, and sauces. Common sizes are: $\frac{1}{4}$ cup, $\frac{1}{2}$ cup, $\frac{3}{4}$ cup, and 1 cup.

Serving spoons: long handled solid or perforated spoons are desirable for serving foods such as vegetables and baked entrees. Such spoons are not identified by capacity. The desired fullness of the spoon should be determined, and servers trained to portion the food uniformly.

Scales: meat is usually the most expensive part of the meal. Therefore, it is especially important to use some kind of control in portioning. A scale is often needed for this purpose. (Meat servings are often stated in ounces of weight per serving.)

Standard size pans: pie pans of specified sizes, as 8 or 9 inches, make it possible to predetermine the number of cuts of pie that can be made; standardized baking pans, as $13 \times 8\frac{1}{2} \times 2$ inches or $20 \times 12 \times 2$ inches, enable servers to cut equal portions of cake, quick breads, puddings, meat loaves, some main dish casseroles.

Portion cups: paper dishes of various sizes may be used for such foods as salad dressings or other condiments, apple sauce, cole slaw, and puddings.

Portion-pack meats, poultry, and fish are available in many weights and sizes. These may be advantageous for certain occasions, to save time and/or money as well as to control portions.

BUYING, AND AMOUNTS OF FOOD NEEDED

Purchasing food in quantity should be less expensive than buying at retail. It also saves money to buy 6 No. 10 size cans rather than 25 one-pound cans for the same number of portions, and it takes less time to open the six large cans.

Wholesale dealers handle cases of canned goods and large units of other foods. Many retail merchants also sell case lots and institution size packs for

group meals. It pays to check several sources before deciding where to buy. When comparing prices, be sure the prices are on similar quality as well as quantity of food.

Buy the grade or quality best suited for the purpose. Fancy, whole-slice pineapple is unnecessary, if it is to be diced in a salad. Less expensive broken slices will serve as well.

Buy fresh produce by weight rather than count or measure. Good color in produce usually indicates good quality. Avoid bruised, soft, or wilted foods.

Convenience Foods of many types are available in addition to the pre-portioned meats previously mentioned.

Boneless roasts can simplify slicing and portion control; may also materially reduce oven space requirement, as with **turkey rolls**.

Pre-peeled potatoes will reduce labor and time requirements.

Instant foods, such as coffee, tea, mashed potatoes, may be useful as time and labor savers.

Mixes for baked goods, either commercially or home prepared*, can speed up food preparation and may reduce costs.

The following tables help in estimating amounts of foods to buy. For further detail check the resources mentioned.

FROZEN FRUITS AND VEGETABLES

Frozen fruits and vegetables are purchased by the pound. Regardless of size or type of package, a general rule would be:

Allow 10 pounds for fifty ½ cup servings (3 oz)

FOOD BUYING GUIDE FOR 100 SERVINGS

Food as Purchased	Size of Serving	Amount Needed to Serve 100	Additional Information
Cereal and Cereal Products			
Macaroni	1 c, cooked	11½ lb	1 lb dry measures 2¾ c
Noodles	1 c, cooked	12½ lb	1 lb dry measures 7¼ c
Spaghetti	1 c, cooked	11 lb	1 lb dry measures 6 c
Dairy Products			
Butter or fortified margarine	2 tsp	2¼ lb	For buttered vegetables allow 1 lb per 100 servings
Cottage cheese	about ¼ c (2 oz)	12½ lb	
Cream, coffee	2 Tbsp	3¼ qt	
Cream, whipping	1¼ Tbsp whipped	1 qt	Doubles volume when whipped
Ice cream, bulk	No. 12 scoop	16 qt (4 gal)	Allows generous rounding of dips

* See basic mix recipes in previous section of bulletin.

FOOD BUYING GUIDE FOR 100 SERVINGS—Continued

Food as Purchased	Size of Serving	Amount Needed to Serve 100	Additional Information
Fruits and Vegetables (Fresh)			
Cantaloupe	½ c cubed	36½ lb	
Strawberries	½ c raw whole	13 qt	
Beans, snap	½ c cooked	18 to 20 lb	
Broccoli	½ c cooked cuts	32 lb	
Cabbage, shredded	½ c raw	11 lb	
	½ c cooked	22 lb	
Carrots	½ c cooked	24 lb	
	2-3 strips	4 to 5 lb	As relish
Celery, cubed	¼ c raw	9 to 10 lb	
	4 pieces	9 to 10 lb	As relish
Lettuce, head	½ c pieces	12 lb	For salad
Onions, fresh slices	¼ c	6¾ lb	
chopped	¼ c	10 lb	
dehydrated slices	¼ c	2 lb	
Potatoes, white fresh	½ c mashed	30 lb	
dehydrated	½ c mashed	4¾ lb	
	1 medium, baked or boiled	25 approx	Can buy by count, approx 4 per lb
Radishes, without tops	3-4 radishes	9 lb	
Squash, Hubbard or Butternut	½ c mashed	47 lb	
Sweet Potatoes	½ c cooked, mashed	35 lb	3 medium sweet potatoes per lb
Tomatoes	1 small, raw	25 lb	
Meat, Poultry, Fish			
Beef			
Ground	3 oz cooked meat	27 lb approx	
Roast, chuck, bone in	3 oz cooked lean meat	40 lb approx	
Roast, round, bone in	3 oz cooked lean meat	33 lb approx	
Roast, round, boneless	3-4 oz cooked lean meat	35 lb approx	
Pork, cured			
Ham, boneless	3 oz sliced lean meat	30 lb approx	
Ham, bone in	3 oz sliced lean meat	47 lb approx	
Ham, bone in, precooked	3 oz sliced lean meat	40 lb approx	
Pork, fresh			
Chops, bone in loin or rib	2 chops (approx 4 oz cooked)	50 lb approx	Chops cut 4 per lb

FOOD BUYING GUIDE FOR 100 SERVINGS—Continued

Food as Purchased	Size of Serving	Amount Needed to Serve 100	Additional Information
Pork, fresh (cont'd)	lean meat)		
Roast, loin, bone in	3 oz cooked lean meat	40 to 45 lb approx	
Boneless	3 oz cooked lean meat	28 to 30 lb approx	
Frankfurters	1 frank, 2 oz	12½ lb	
Luncheon meat, all types	2 oz	12½ lb	
Chicken			
Fryers, ready to cook	2 pieces	42 lb	
Stewing, ready to cook	1 meaty, 1 bony 2 oz lean cooked	29 lb	For chicken pie, salad, a la king
Turkey			
Ready to cook young hens or toms	3 oz cooked lean meat	45 to 50 lb	
Frozen roll, boneless			
Uncooked	3 oz cooked lean meat	31 lb	
Cooked	3 oz cooked lean meat	21 lb	
Fish, fresh			
Filletts	3 oz cooked	30 lb	
Fish, canned			
Salmon	2 oz fish	16 16-oz cans	
Tuna	2 oz fish	34 6- to 7-oz cans	
Miscellaneous			
Breads			
Thin, for sandwiches or toast	2 slices	14 1-lb loaves	
Quick loaf	2-3 slices	10 loaves, 4 x 9 in	
Rolls, breakfast	1 roll	9 doz	
dinner	1½ roll	12 doz	
Biscuit, muffin	2 pieces	18 doz	
Griddle cakes	2 cakes (3½ oz)	13 qt batter	
Beverages			
Cocoa	2 c, 6-oz ea	2 lb dry cocoa	8 oz makes 50 cups
Coffee	2 c, 6-oz ea	4 lb ground coffee	1 lb makes 50 cups
Tea	2 c, 6-oz ea	10 oz dry tea	
Olives	3-4	4 to 5 qt (med size)	
Potato Chips		6 lb	
Salad Dressings	1 to 1½ Tbsp	2 to 3 qt	
Salted nuts	1 to 1½ Tbsp	3 lb	
Sugar, for coffee			
Cubes	1 cube (large)	2 lb	
Granulated	1½ tsp	1½ lb	

CANNED FOODS

COMMON CONTAINER SIZES*

Container			
Industry Term	Consumer Description		Products
	Approximate Net Weight (Check label)	Approx. Cups	
8 ounce	8 oz	1	Fruits, vegetables, specialties
Picnic	10½ to 12 oz	1¼	Condensed soups, small quantities of fruits, vegetables, meat and fish products, specialties
12 ounce (Vacuum)	12 oz	1½	Used largely for vacuum packed corn
No. 300	14 to 16 oz	1¾	Pork and beans, baked beans, meat products, cranberry sauce, blueberries, specialties
No. 303	16 to 17 oz	2	Fruits, vegetables, meat products, ready-to-serve soups, specialties
No. 2	1 lb 4 oz or 1 pt 2 fl oz	2½	Juices, ready-to-serve soups, specialties, and a few fruits and vegetables
No. 2½	1 lb 13 oz	3½	Fruits, some vegetables (pumpkin, sauerkraut, spinach and other greens, tomatoes)
No. 3 cyl	3 lb 3 oz or 1 qt 14 fl oz	5¾	Fruit and vegetable juices, pork and beans, condensed soup and some vegetables for institutional use
No. 10	6½ lb to 7 lb 5 oz	12-13	Fruits, vegetables for restaurant and institutional use

SUBSTITUTING ONE CAN FOR ANOTHER FOR INSTITUTIONAL USE*

	Approx.
1 No. 10 can equals	7 No. 303 cans
	5 No. 2 cans
	4 No. 2½ cans
	2 No. 3 cyl. cans

* Tables 4 and 5 from Canned Food Tables, Consumer Service Div., National Canners Association.

PLANNING COSTS AND PRICING THE MEAL

Food does cost money, whether purchased at the market or donated by group members. This cost generally must be recovered, whether or not a profit is desired. Basic cost for serving the meal must be estimated as a basis for establishing a selling price. If a profit is desired, this must be added to the total cost before setting the price. The following steps will be helpful in determining cost and meal selling price:

1. Plan the menu and select recipes to be used.
2. Make a market order indicating quantities of each item needed.
3. Estimate the cost of each item, including donated foods, using current market prices.
4. Total these costs.
5. Figure the cost of any hired labor. (For example: janitor or dishwasher.)
6. Estimate the cost of all other expenses, such as paper goods, printing tickets, decorations, rent, laundry, and detergents. Include a small amount for unforeseen expenses, cancellations, or sales tax if required.
7. Total all costs.
8. Decide on the per cent or amount of profit desired (if any) and add to total cost.
9. Divide that grand total by the number of paying guests expected. This gives the selling price per person.

It is important to include a value for donated foods in the total figure, to get a true cost of the meal. If the value of the donated food is greater than the cash profit made on the meal, no net profit was realised. In that case it might have been better to sell the donated food and not bother with a meal. The person who donates food should be aware that a fair value will be included in the selling price of the meal; this makes the contribution worth while and may insure getting such a donation at another time.

For a meal planned primarily to make money, the total expense figure can be doubled, then divided by the expected number of paying guests. This makes a fair selling price and assures good value to the guest. A 25 per cent markup yields a small profit and is consistent with a fellowship or service objective. In this case any profit is of secondary importance. If no profit is desired, a small markup (5 to 10 per cent) is advisable to cover any unexpected costs or loss of anticipated income.

Per-meal selling prices should be rounded to even figures for convenience in making change. For instance, a figure of \$1.43 might be set at \$1.40 or \$1.50. Multiples of 25 cents are simplest and demand less change.

An example of the above calculations is:

Total expenses:

Total est. cost of food	\$192.00	
Janitor fee	\$ 7.00	
Paper supplies	6.00	
Decorations	8.00	
Hall rental	10.00	
<hr/>		
Total other costs	31.00	
	<hr/>	
Subtotal	\$223.00	
5% for unforeseen expenses	11.15	
	<hr/>	
Total estimated expenses		\$234.15

Selling prices: (Cost plus profit, divided by number of paying guests)

Estimated Paying Guests—300		Meal Price
Total expense	\$234.15	.80
25% markup (low profit)		1.00
100% markup (average profit)		1.60 or 1.75

If those who work on the meal are to pay for their meals, include their number in the "paying guest" category; if they are to pay half price, include half their number; if they will make no payment for the meal, do not include this number in the "paying guest" estimate. In any case, if they are to eat, their number must be included when planning quantities of food needed.

Sometimes the selling price of the meal is established before the menu is planned. In such cases, reverse the above process. An estimate of the number of paying guests will give an approximate total income; desired profit must be subtracted from that total to show what is available for total expenses. When non-food expenses are deducted, the balance will show what is available for food cost. The menu must then be planned within that limit. This calls for very careful estimates of cost for all food items.

Selling leftover food: Even with careful planning, there often is leftover food which may be sold. The price charged should cover the cost of the food involved. When meat is to be sold, the per pound price for cooked meat should be twice the cost of a pound of the raw meat. This allows for shrinkage in cooking, plus bones and fat removed when carving. If the meat is largely cutting scraps, a lower price may be desirable.

One problem in selling leftover food is how it can be packaged for carrying. Paper tubs, such as those used in take-out stores, glass jars, and paper sacks may all be useful. Any cost for containers should be added to the charge for the food being sold.

RECORDS TO KEEP

Keep written records of menus, purchase orders, and work plans for future reference. Notes about things that should be changed, foods that were or were not highly acceptable, problems that could be avoided, and some things that would bear repeating are all worth keeping. Forms for these purposes help to insure having the information available when needed. A file folder or box could serve as a collection point; it should be available to committee chairmen whenever needed. Three forms which could help are shown here.

Form 1 is a record sheet for the general chairman to complete. It includes the menu, people served, who worked and on what committee, and a financial statement. Comments and recommendations for future chairmen to consider could be continued on the back of such a report. The committees vary from one occasion to another, but the names of committee members should be listed below each committee name. If no special price is made for children, that line could be left blank or eliminated. This type of record could be started when the meal is planned and committees are appointed; it would only be complete when the event is finished and all bills have been paid.

Form 2 is a suggested market order form. Use two or more sheets if the menu is complex or several recipes are included. List all menu items and ingredients so needed items will be ordered and costs estimated. The ingredients needed for several items—as milk, butter, and seasonings—can be compiled in one place for a total order, to avoid duplication or confusion. Certain staple items may be on hand; these should be listed under “Amount needed” but not under “Amount to be bought” unless additional supplies are necessary. (Example: a nearly-full box of salt will be more than sufficient—none needs to be purchased; the pepper supply is nearly gone—a new box should be ordered.)

Form 3 is a scheduling worksheet for committee chairmen. A detailed list of all the work to be done is made, then assignments are made to committee members. Working back from the time the meal is to be served, it is possible to determine the time when the earliest jobs must be started; each succeeding task is then written in at the required time. Such a detailed schedule helps in three ways: (1) the chairman can easily check to be sure everything is planned for, and thus avoid last minute emergencies; (2) with realistic time assignments, volunteers can arrive in time to get the work done, but much waste time is eliminated; (3) everyone knows what to do, and work loads can be evenly distributed.

GENERAL RECORD SHEET

MENU

Cranberry Juice
Baked Chicken Barbecue Sauce
Mashed Potatoes Bittered Broccoli
Fettuccine Wedges Assorted Dressings
Hot Rolls and Butter
Apple Pie
Coffee Milk

Event *Father - Son Banquet*
 Date *Feb 5, 1965*
 Place *St. Paul's Church*
 Type of Meal *Dinner*

Meal Selling Price

Adults *\$ 1.50*
 Children *1.00*
 Workers

Estimated Number to be Served	<i>300</i>	Actual Number Served	<i>301</i>
Paid guests—Adults	<i>180</i>	Paid guests—Adults	<i>183</i>
Children	<i>90</i>	Children	<i>90</i>
Non-paid guests	<i>6</i>	Non-paid guests	<i>6</i>
Volunteer workers	<i>24</i>	Volunteer workers	<i>22</i>

Meal Service Time

Volunteer workers *5:45 p.m.*
 Guests *6:30 p.m.*

General Chairman *Mrs. Margorie Barlow*

Committees *Kitchen Dining Room*
 Chm. *Jean Smith*
Ruth Jones
Mary White
Sally Johnson
Becky Farnum

Financial Statement

INCOME		EXPENSES		PROFIT	
Adults	.....	Food	.....	Total	
Children	.....	Supplies	.....	Income	.....
Workers	.....	Decorations	.....	less	
Sale of Food	.....	Labor	.....	Total Expense	.....
		Other	.....	
Total	.....	Total	.....	Profit	.....

Comments and Recommendations.....

MARKET ORDER

 Event Father-Son Banquet
 Date Feb. 5, 1965

Menu and Item Needed	Amount Needed	Amount to be Bought	Estimated Cost*	Actual Cost†	Notes
Cranberry Juice	24 cans	24 cans (#3)	4.80		
Crackers, saltine	6 lbs.	6 lbs.	1.40		
Chicken, frozen cut in quarters	80	80			Allowed extra in case of few more people
Butter	9 lbs				
Onions, dry, sliced	6 lbs, dry	6 lbs			
Vinegar	2 qts.	2 qts			
Worcestershire Sauce	2 qts.	2 qts			
Red pepper	6 Tsp.	1 sm. Box			
Black pepper	1/2 cup	--			
Chili powder	1 cup	1 lg. Box			
Catapult	13 1/2 qt	4 #10 cans + 6 bottles			
Apple pie (8" - 6 cuts)	50 pies		30.00	Donated	2 pies from each member of Circle (26 members)
		Total			

* Use this column when planning meal, for pricing, etc.

† Use this column after the meal, for records of money actually spent.

If foods are donated, estimate cost for that column—mark as "donated" in actual cost column, and note who donated. Jot down any notes that might help next time.

WORK SCHEDULE

Event Father-Son Banquet
 Name of Committee Food Preparation Date Feb 5, 1965
 Serving Time
 Name of Committee Chairman Mrs. Jean Smith Workers 5:45 p.m.
 Guests 6:30 p.m.
 (Chairman will be supervising-helping where needed, probably little or no specific job.)

Time	Names of Committee Members to Work
(Begin with earliest time work must be started.)	(List each job to be done in detail for each worker.)

Ruth	Mary	Sally	Betty	Clara
Jones	White	Johnson	Farnum	Wells

Work and dry
 3:00 p.m. chicken pieces -
 refrigerate. Start
 barbecue sauce.

3:50 p.m. Set oven Prepare
 for 400 F. baking
 and turn on pans.

4:30 p.m. Prepare 1 pan of 24 portions for workers. Put in oven.	Trim and clean lettuce. Cut in 6ths Arrange on trays and refrigerate	Receive pieces cut and have plates ready in sections for serving.
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SERVING

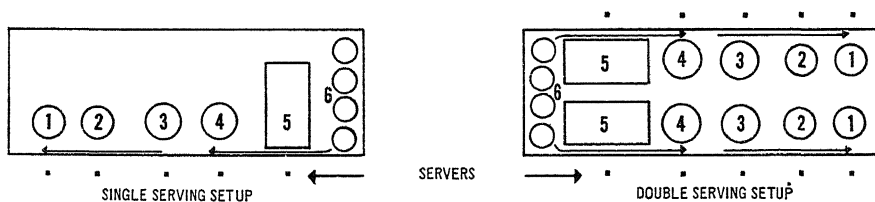
KITCHEN SERVICE OF FOOD

An accepted rule in food service is that hot foods should be served **hot**, and cold foods **cold**. Food looks better, tastes better, and is safer when desirable temperatures are maintained.

To accomplish this, plan carefully the use of the kitchen and equipment. Plates and/or serving dishes can be heated for hot foods, or chilled for cold foods. During the serving period, hot foods can be held at proper heat by using special equipment such as "hot tables," double boilers, automatic heated trays, and chafing dishes. Oven space serves well to hold hot foods for a limited time, if adequate space is available. When food preparation is timed properly, the finished foods need not be held for long periods.

Plan a system for serving the foods so workers know who is to serve which items and in what order. Set up one plate as a pattern for serving. Have one server for each item to be served, plus one to check plates or serving dishes for spills before they go to the dining room. If a separate garnish is used, assign this item to someone too. Extra workers will be needed to replenish food and dishes at the serving counter; plan for them. Inform servers of portion sizes, and how many servings are to be obtained from each pan of food. Assemble and lay out the equipment before serving begins. Serve plates as rapidly as waitresses can pick them up.

To speed up the service for groups of 100 or more, a double serving line is desirable. This arrangement takes twice as many people to serve. Note the diagrams below showing a convenient sequence for serving:



Single and Double Serving Setups

- | | | |
|------------|--------------|-----------|
| 1. Garnish | 3. Vegetable | 5. Meat |
| 2. Gravy | 4. Potato | 6. Plates |

Count and warm the dinner plates (or serving dishes) before serving. Stack the plates on serving counter, 10 or 12 to a stack. As the serving progresses, it is easy to determine how many are still to be served, a total count can be quickly calculated at the end of the period.

When service of the main course is finished, take care of leftover foods by preparing them for carrying home and refrigerating, or by discarding

them. Soaking pots and pans as soon as they are emptied makes dishwashing easier.

Dessert is served when tables have been cleared of the main course. A separate serving crew can have desserts ready to go at that time.

DINING ROOM SERVICE

Three general types of food service are discussed here:

1. **Self Service**—All foods are on a serving table around which guests walk to serve themselves. They carry their own filled plates to the tables where they are to eat. Such service is used for buffets, cafeteria meals, teas, and refreshments.
2. **Waitress or Table Service**—Waitresses serve seated guests with plates of food which have been filled in the kitchen.
3. **Family Style Service**—Food is put on the table in serving dishes for which guests serve themselves, or one person at the table serves the plates. Waitresses bring dishes of food from the kitchen, and refill serving dishes when necessary.

The type of service used depends upon the occasion, the equipment, and the amount of help available. In any case, dining tables should be arranged and set for the guests by the dining room committee.

As a guide, use a diagram to illustrate the desired arrangement of tables and chairs and the assignment of waitress "stations."

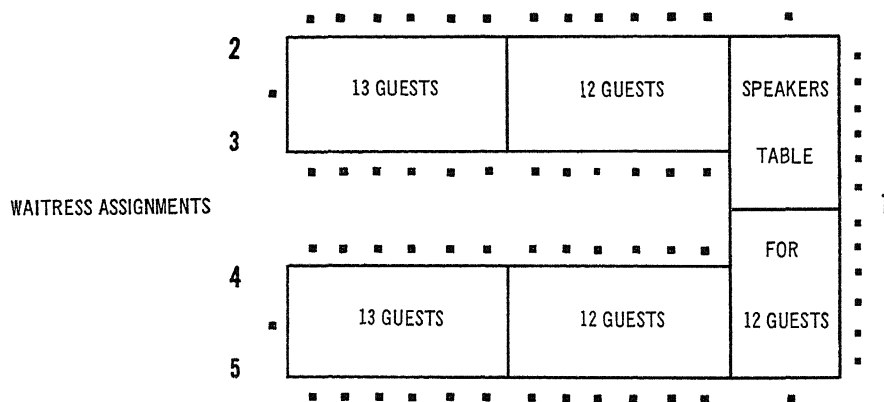
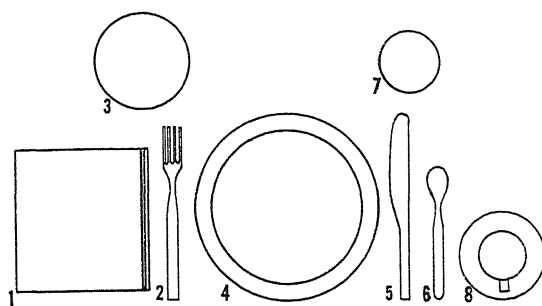


Table covers may be place mats, paper cloths, or cotton or linen, depending upon the occasion and the effect desired. An attractive place setting, or "cover," might look like this:



Arrangement for "Cover" or Setting

1. Napkin
2. Fork
3. Bread and Butter Plate
4. Dinner Plate
5. Knife
6. Spoon
7. Water Glass
8. Cup and Saucer

For self service, silverware may be wrapped in the napkin and laid on a tray, it may be grouped on trays on the serving table, or it may be in place on the tables, eliminating the need to carry it along with food.

The serving table for self service meals should be arranged so guests can conveniently serve themselves. A double serving line speeds the service, but guests may need some direction from a hostess. The sketch below shows one convenient arrangement:

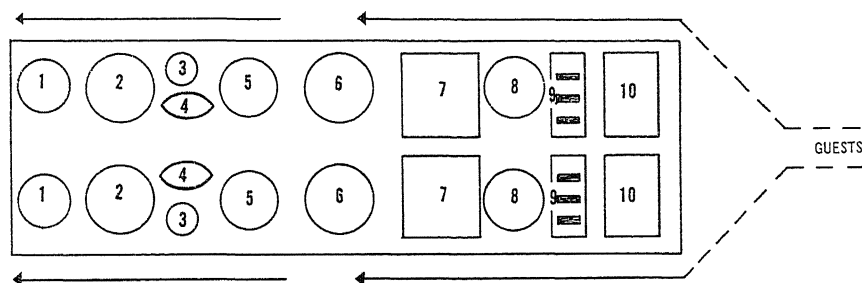


Table Set for Cafeteria or Buffet Service

- | | | | | |
|--------------|-----------|--------------|-----------|-----------|
| 1. Beverages | 3. Butter | 5. Vegetable | 7. Meat | 9. Silver |
| 2. Dessert | 4. Bread | 6. Potato | 8. Plates | 10. Trays |

For table service, one waitress can serve 10 to 12 people. Assign each waitress a specific area to serve. Before the meal the waitresses should check these things:

- * Tables correctly and completely set with needed equipment
- * Water poured; butter, cream, sugar on table, plus other condiments desired
- * Salads placed at the last minute so they will be crisp and cold
- * A cold first course on the table (If soup is to be served, it is placed after guests are seated.)
- * A tray for clearing dishes and a pitcher of water for refilling glasses at each serving station

As the first course is finished, dishes are removed. These dishes should be placed on tray, with the heaviest dishes in the center of the tray and others around the outside, for good balance. Soiled dishes should then be removed to dishwashing section.

Waitresses may carry main course plates to the dining room on trays or two at a time in the hands. All guests at one table should be served at about the same time so they can begin eating together. With long tables, waitresses can follow each other, placing the next plate where the last waitress left off and progressing around the table to the right until all have been served. While plates are being served, other waitresses should follow at once with rolls and beverages to complete the course.

After all guests have been served the main course, waitresses should return to their own areas to serve refills, and to care for their section. When guests have finished eating, the waitresses proceed with clearing in this manner:

1. Remove dishes from center of table to tray and take to kitchen.
2. Remove all dishes and silver from one cover at a time.
3. Place any additional silver needed for dessert.
4. Refill glasses without removing glasses from table.
5. Serve deserts and refill beverages.

If there is to be a program after the meal, remove dessert dishes before it starts.

There are many possible ways of serving. The chief consideration is the comfort of the guest, and speedy, efficient service. All waitresses should follow the same method, for uniform and attractive service. The suggestions below are simple and convenient:

1. Serve and remove all foods with the left hand from the left side of the guest. Dishes may be transferred to the right hand or to a tray behind the guest. Do not stack dishes in front of guests.
2. Serve and remove all beverages with the right hand from the right side.
3. Watch the guests and try to anticipate their needs.
4. Handle dishes and silverware as quietly as possible when serving and clearing.
5. Use a tray to save steps, and do not load too heavily for carrying. A small truck or cart is a help in transporting heavy loads.
6. Avoid unnecessary talking during serving.

SANITATION

Whenever food is offered for public consumption there is an implied guarantee that that food will be wholesome. Nevertheless, each year, thousands of Americans are made ill by unsafe food eaten away from home. No one deliberately serves bad food, but there are hazards to be noted and safeguards to be taken. It is the responsibility of those in charge to provide safe food.

State and local health departments have regulations pertaining to public food service. Some organizations that serve community meals are excepted from the general regulations because so few meals are served. However, this exception, as defined in the Ohio Revised Code Pertaining to Food Service Operations, specifies "Churches, school, fraternal, or veterans' organizations serving meals or lunches **on their premises.**"* Thus, any food service away from the premises of an otherwise excepted organization is subject to health department regulations.

It is well to check with the local health department for any specific regulations or recommendations regarding sanitation. Local regulations may require health examinations, specific dish and utensil storage, and sanitizing procedures. Any group involved with public meals should know and work within local regulations.

INDIVIDUAL RESPONSIBILITY

Basic to sanitation in community meal service is the knowledge and application of rules of good personal hygiene by workers. A checklist, such as the following, posted in a convenient place, will serve as a reminder:

1. Remain at home if ill.
2. Avoid working with food if you have cuts, burns, or infections of any kind—including boils, sore throat, or cold. (All are sources of bacteria which may contaminate food.)
3. Do not cough, sneeze, or smoke near food or dishes.
4. Wash hands with hot soapy water before beginning to work, frequently during work, and after using handkerchiefs or toilet. Use disposable towels for drying hands.
5. Keep body, teeth, and hair clean. Use a deodorant.
6. Wear a hair net.
7. Have clean, trimmed nails, without polish.
8. Wear a clean, comfortable wash dress; use apron if desired.
9. Remove unnecessary jewelry, such as bracelets.
10. Use separate spoons or forks for tasting.

A full-length mirror mounted where workers will see themselves may encourage good grooming.

* Good Food Service. Ohio Department of Health, p. 21.

FOOD SELECTION

Safety and sanitation start with the selection of foods:

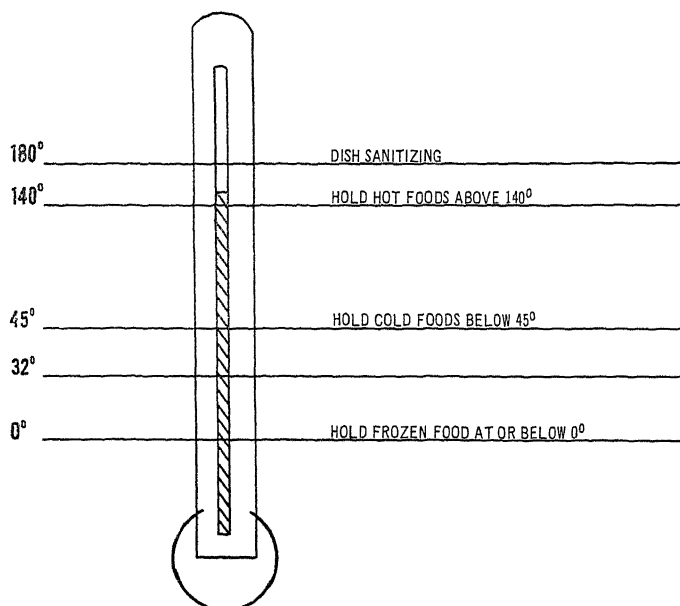
1. Buy all food and beverage supplies from approved sources. Use water that has been checked by local health department.
2. Wash all produce carefully to remove soil, and any remaining spray residue. Where possible (apples, cucumbers) use warm water and detergent.
3. Use NO home canned fruits or vegetables.

FOOD SAFETY AND HANDLING

Certain bacteria are harmful and may cause food -related illnesses if allowed to multiply in food materials. Bacterial development is greatest in certain types of foods, and within known temperature ranges, as follows:

Hazardous foods include: Meat fish, poultry, eggs, especially if cut or chopped
Non-acid salads, such as chicken, tuna, potato, macaroni
Sandwich fillings—salad type, cold cuts
Custard and cream filled desserts, including cheese cake

The United States Public Health Service* states, "Safe temperatures, as applied to potentially hazardous foods, shall mean temperatures of 45°F or below, and 140°F or above."



* Food Service Sanitation Manual, U.S. Public Health Service, p. 24. Washington, D. C.

Effective planning and proper handling minimize the problem of assuring safe food. Here are some suggestions:

1. KEEP HOT (above 140°F) or CHILL and REFRIGERATE (below 45°F) all potentially hazardous foods, if they cannot be served immediately.
2. Keep to a minimum the number of hazardous foods on a menu.
3. Limit foods to be solicited from home to those not considered hazardous—pickles, jellies, gelatin salads and desserts, rolls and breads, raw vegetables and relishes, cakes, cookies, and fruit pies.

Getting the food to the consumer must also be done in a sanitary manner. Those who serve the food should observe the rules of good personal hygiene mentioned earlier. Acceptable techniques of serving are as follows:

1. Always grasp silverware by handles.
2. Handle glasses from the bottoms, cups by the handles.
3. Use a fork for serving pats of butter.
4. Handle breads, pastry, and ice cubes with a napkin or tongs—not fingers.
5. Keep thumb and fingers out of food and off eating surfaces of dishes.
6. When clearing food and dishes, observe the same general rules.

STORAGE

Proper storage of foods, utensils, and table service is important to sanitary food service.

Foods: Refrigeration does not kill bacteria, but cold temperatures will keep them inactive. Refrigeration also maintains quality and flavor in foods. Contrary to some popular beliefs, cooked foods can be refrigerated while still hot. Containers of hot foods should not be tightly covered, since this tends to keep heat inside. (To avoid transfer of flavors, other foods in the refrigerator may need to be covered.) It may take several hours to cool a large container of food to 45°F or lower; therefore, it is important that food should be cooled rapidly in shallow containers. These should be placed in the refrigerator so that air may circulate freely around the containers and throughout the unit. To speed up the cooling process, containers of food may be placed in cold running water and stirred, before transferring to the refrigerator. **IMPORTANT: KEEP REFRIGERATOR CLEAN!**

Frozen foods should be held at 0°F or lower. Once thawed, they should be cooked promptly. Foods should not be refrozen. *Dry foods* should be stored in a room that is kept clean, dry, cool, and orderly. **Hot food serving tables** must keep food HOT (150° is a desirable minimum) and food should be held there only for short periods—preferably not more than 20 minutes.

Utensils: Basically, cooking utensils should be stored well above the floor, either on shelves or hooks. In many community kitchens, because of infrequent use, such utensils are best stored in closed cupboards or drawers

that are protected from dirt and vermin. Utensils should be thoroughly cleaned before use, if not regularly used.

Table Service: China should be stored in closed cabinets or cupboards. Cups and glasses are best stored upside down on clean trays or in racks. Silverware should be stored in partitioned bins or drawers, in such a way that it will be removed by the handles. Dishes that are cracked or chipped should be discarded.

Housekeeping:

Garbage and trash should be placed in metal containers with tight covers. Garbage should be removed as soon as possible after the meal, and the emptied containers cleaned with hot soapy water, rinsed, sanitized, and air dried. Household chlorine bleach is a good sanitizing agent, if directions with the bleach are followed.

Rodents and insects can spread disease and cost money through waste of food. All openings through which rodents might enter should be sealed. Windows and doors to the outside should be self-closing. Food and utensils should be protected from insects by screens, glass cases or closed cupboards; insecticide sprays may be needed for occasional control, and should be used as directed. Be sure food scraps are cleaned up and trash cleared from entire area.

DISHWASHING

The installation of a mechanical dishwasher does not assure clean dishes. Whether dishes are washed by hand or by machine, the results depend on the persons working at it. Dishwashing includes thorough cleaning and sanitizing of all dishes and utensils used in preparing and serving food. It can be well done by hand or machine, if these recommended procedures are followed:

IN GENERAL:

Scrape dishes thoroughly and rinse to remove food particles; sort according to kind and size.

BY HAND:

A 3-section sink is recommended for either **hot water** or **chemical** methods. Each section should be 18 to 20 inches square, and rinse sections should hold at least 12 inches of water.

Section 1—wash dishes in clean, soft, warm water (110°-120°F), with a good detergent. Change water often. Put dishes in wire racks or baskets, separated so they do not touch.

Section 2—immerse baskets of dishes in clean hot water (120°-140°F); change water frequently.

Section 3—

HOT WATER METHOD—immerse dishes in very hot (170°-180°F), clear water for at least 30 seconds, so dishes will dry without toweling and will be more sanitary. The high temperature required for sanitizing usually requires a special heater under the third sink.

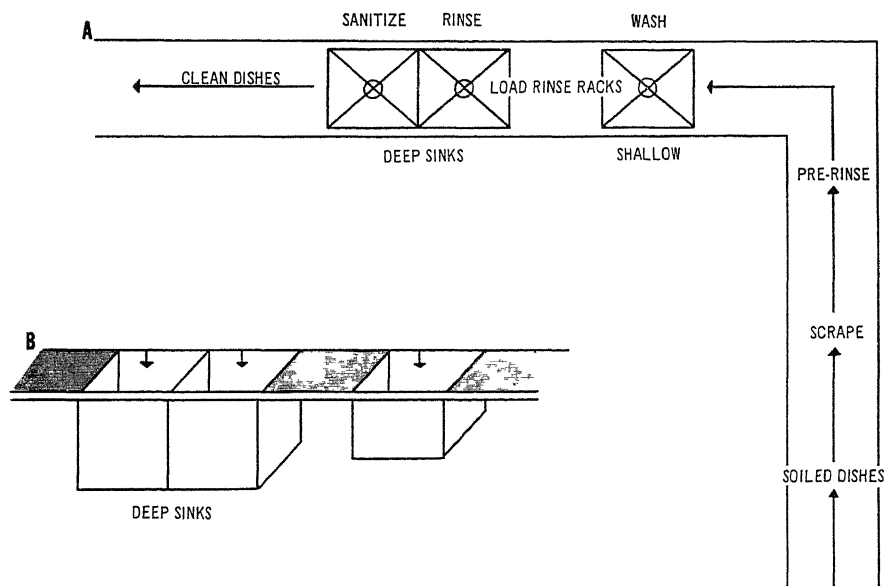
CHEMICAL METHOD—immerse baskets of dishes in water mixed with chemical sanitizer for *at least 30 seconds*; drain dry. Toweling is discouraged; if it is needed, be sure towels are clean and replaced frequently. Use a sanitizing chemical approved by the local health department. The sanitarian can advise on amounts needed. A solution made with household chlorine bleach is often acceptable, but avoid use of chlorine for sanitizing silverware.

BY MACHINE:

Generally a one-tank commercial dishwashing machine that handles dishes for 100 to 250 people per meal would be suitable for a community kitchen. The decision to install a dishwashing machine may depend on a suitable supply of hot water (140°F for washing, 180°F for rinsing). In rural areas, the size of septic tanks or leach beds may be important. Manufacturers' directions for use and care of the machine should be posted nearby and carefully followed to insure satisfactory performance.

Hand Dishwashing Section:

NOTE: The shallow wash sink is suggested to prevent fatigue while washing dishes. Rinse sinks need more depth to immerse dishes set in racks.



The shape of a dish section must fit the available space; it can be L,U, or straight line. The amount of dish table space needed will depend on numbers to be served, dishes used, and number of people working. Solid dish area must be large enough to hold all dishes removed at one time, because they are usually removed from tables faster than they can be scraped, stacked, and washed.

The same flow of work is recommended with a dishwasher, but pre-rinse sink may be closer to machine. A single-tank dishwasher requires less space than the sinks shown above. For hand dishwashing, a double line of sinks, back-to-back in an island arrangement, speeds up the procedure; however, it requires a double dishwashing crew.

SAFETY

Safety goes hand-in-hand with sanitation and often involves some phase of housekeeping. When a group of people work together in a community kitchen, the equipment and surroundings may be unfamiliar to some, and this may cause accidents. Several people, working together, may unwittingly interfere with one another. Detailed plans of work help to eliminate some possibilities for accidents.

General safety recommendations include the following:

1. **Prevent falls** by cleaning up spilled food or beverage at once. Have plenty of paper towels handy for such cleanup; hang all mops and brooms; keep traffic areas clear.
2. **Avoid collisions** by maintaining one-way traffic to and from dining room.
3. **Avoid burns:** provide and use thick, dry pot holders; handle hot liquids with extra care; lift far edge of lids first on kettles and roasters to avoid steam burns in the face; light gas ovens with care, being sure flame is burning before door is closed.
4. **Prevent electrical shocks** by eliminating worn cords and broken plugs.
5. **Fire prevention:** keep exhaust filters clean; keep a two-quart CO₂ type fire extinguisher in good working order.
6. Maintain a well equipped first aid kit for immediate care of minor cuts or burns.
7. Call a doctor if serious injury occurs.

GENERAL CLEANUP

Kitchen cleanup goes on throughout the preparation process. Cooking utensils should be cleaned and stored when their use is completed. Many can be washed before service of the meal. Make a final checkup to see that utensils and equipment are clean and properly stored; counters, tables and floors clean; garbage and trash removed. Even if a janitor handles the regular care of floors, all food scraps and spillages should be cleared to discourage rodents and insects.

Dining room cleanup involves getting all food and soiled dishes out of the room, tables cleared, and the room put in order for its next use. Take all dishes to the dish section for scraping and washing. Carts and trays help to get this job done efficiently.

Dish room cleanup includes receiving, sorting, scraping, and cleaning dishes. Prearrangement of tables for soiled dishes, and bins or cans for paper refuse and garbage helps assure efficient, sanitary handling of dishes.

Kitchen and dining rooms used for community meals often serve dual purposes. If several groups use the areas, it is best to have one person responsible for checking before and after each use. If no one is assigned this task, sanitation is hard to maintain, and needed repairs are often neglected.

SUGGESTIONS FOR THE KITCHEN

DESIRABLE WORKING CONDITIONS

Adequate light is important in any working situation. It is especially important on work surfaces where food is to be prepared. Natural light from windows is desirable, supplemented by artificial light as needed. Lights should be shaded for protection from glare, and placed so all work surfaces are directly lighted and free of shadows. Fluorescent tubes deliver more light than incandescent bulbs for the wattage used, and are available in long strips and banks of fixtures to fit any room.

Ventilation is important for the comfort of workers and to control cooking odors. Screened windows which can be opened at top and bottom provide good circulation of air. In a large room or in warm weather, fans may be needed to move the air sufficiently for comfort. An exhaust fan near the cooking surfaces helps to draw off cooking odors and smoke.

Working heights should be planned to avoid fatigue among kitchen workers. Thirty-six inches is standard for much equipment. If equipment is too low for the average worker, it is often possible to have it raised a few inches. A common example is the deep sink for washing dishes. A shallow wash sink, set at the proper height for comfort while standing and reaching dishes, is a good investment. Thirty-eight inches is often recommended for the height of a solid dish table, with a slight slope toward the wash unit so the table drains well.

Comfortable shoes and dress do much to make kitchen work easy and pleasant. Shoes with rubber heels and, if possible, with rubber soles, tend to lessen fatigue and are safer for working. Cool washable dresses are most suitable in the kitchen. All food handlers should wear hair nets.

KITCHEN ARRANGEMENTS

This bulletin is not designed to give complete directions for planning a new or remodeled community kitchen. However, the arrangement of equipment and work areas within a kitchen have considerable influence on the efficiency, comfort, and satisfaction of workers. Sometimes a simple rearrangement can do much to improve the situation.

Work areas should be arranged in the order in which work would normally progress, from receiving and storing food, through preparation of vegetables, cooking and baking, serving and cleanup. If meal planning calls for donated foods to be brought from home, adequate space must be planned for storage of this food without interfering with other work.

Avoid cross traffic through the work areas. In community kitchens, where groups of people work together, large work surfaces and wide aisle space may be needed to accommodate the numbers of people normally working in the area.

DESIRABLE EQUIPMENT

Institution type equipment is most desirable for quantity food production, because its size and weight are designed for the work to be done. Capacity charts are available to help determine required size.

Basic Equipment:

Range*—gas or electric, with 2 types of cooking surface: burners, for quick heat; flat top, for even heat over entire surface

Stack ovens—if more than range ovens are needed

Cooks' table—

Mixer—if mashing and/or beating must be done

Can opener—may be hand or power operated

Griddles or grills—if meal plans call for this type of cooking

Portable tables or carts—with at least 2" casters—size to pass through doorways

Trays—metal or plastic, at least a dozen

Beverage preparation is best handled at a separated area—often a mobile unit to go directly into the dining room for serving. The area should have a water tap; electric outlet(s) for percolator or dripolator pots, or other heating units; coffee maker(s); kettle or pot for tea water; storage space for supplies, including serving pitchers. If conventionally ground coffee is to be used, percolators may be most desirable because hot water need not be lifted or handled. Instant coffee making requires equipment for heating water and holding coffee just under boiling. A refrigerated water source in the dining room provides drinking water where it's needed and eliminates much kitchen traffic.

Vegetable and salad preparation: sinks for washing fruits and vegetables, work tables with drawer(s) for small equipment; refrigerated space to store salads or salad ingredients until serving time. An institution style refrigerator with closely spaced adjustable shelves is excellent for this purpose, providing maximum storage in minimum cabinet space.

* With the current trend in food technology toward the use of partially or completely pre-prepared foods, little range space may be needed. Specialized cooking equipment, such as steam jacketed kettles, griddles, fryers, and extra ovens may be preferred. Decisions on this matter depend on available money and labor, planned use of pre-prepared foods, and the types of meals to be served.

Storage: refrigerator (may be part of above or separate unit); metal or heavy plastic cans or bins with tight fitting lids for staples kept in the kitchen; cupboards for dish and utensil storage, to protect from soil between uses. Locked cupboards can prevent loss of equipment, especially if the kitchen is used by many groups.

Serving: Serving table—may be heated or not

Portioning equipment and other serving utensils

Trays for waitresses (more trays if cafeteria service is planned)

Serving dishes for table service

Tablespoons and serving forks

Dishes, glassware and silver: quantity needed will depend on the number of people to be served. Having one and one half times the average number served allows for breakage and for possible small increases in numbers served. Some pieces are used for more than one purpose; bread and butter plates may also serve as underliners for an appetizer and/or for dessert service; salad forks may also serve as dessert forks. When several uses are planned for an item, a greater number will be needed than of one-use items. It is not always possible to cleanse one group of dishes and return them for later use in the same meal.

Basic pieces would include:

Dinner plates (10-inch)

Salad plates

Bread and butter plates

Sauce dishes

Cups and saucers

Knives

Forks (dinner and dessert)

Soup spoons

Teaspoons (2 per setting)

Juice glasses (4-oz.)

Water glasses (8- or 10-oz.)

Institution china or plastic give better service for the money than household dinnerware, and either china or plastic may be selected. Colors and/or patterns on dishes should be subdued, since they serve as a background for food and should not compete for attention. Silver and stainless steel offer choices in flatware.

Disposable table service is available in attractive colors and patterns. It is light in weight, durable, and especially desirable for meals served out of doors. Dishwashing is minimized and time and labor needs are reduced when disposable table service is used. Plastic coatings on paper goods prevent soaking and flavor transfer; some paper goods may be used for oven cookery.

Small equipment: durable small equipment purchased from a restaurant or hotel supply company will last much longer and work better than poorly constructed, cheap utensils. Whenever possible, to insure ease in cleaning and sanitizing, consider equipment bearing the seal of the National Sanitation Foundation. A medium weight institution style pot or pan will serve well for moderate cost.

Other: a small handwashing sink is recommended in which workers may wash hands without interfering with other work going on in the kitchen.

REFERENCES: QUANTITY MEAL SERVICE

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4. *Recipes for Quantity Service* (U S Department of Agriculture Home Economics Research Report No 5) U S Government Printing Office, Washington, D C 1958

BOOKLETS

1. CROCKER, BETTY *The More the Merrier* General Mills, Inc, Minneapolis, Minn
2. LOGAN, MARTHA *Hostess Recipes for Fifty* Swift & Company, Chicago, Ill

Other sources of bulletins booklets or recipe cards include the following—many are free, others have a small charge

The American Institute of Baking, Chicago, Ill
The American Dry Milk Institute, 211 N LaSalle St, Chicago, Ill
General Foods Corp, Institutional Prod Div, 250 North St, White Plains N Y
Kansas Wheat Commission, 201 W First St, Hutchinson, Kan
Lipton Kitchens—Thos J Lipton, Inc, Hoboken, N J
Local Power & Gas Companies may have materials available
National Canners Assoc, Consumer Service Div, 1133 20th St, NW, Washington, D C
National Livestock and Meat Board 407 S Dearborn St, Chicago 5, Ill
National Turkey Federation, Mount Morris, Ill (Turkey Handbook)
Paper Cup & Container Institute, Ind, 250 Park Ave, New York, N Y
'Purchase and Use of Canned Foods American Can Co, 100 Park Ave, New York, N Y 10017
Other Food Processors—check local distributors

GENERAL

WEST, WOOD & HARGER *Food Service in Institutions* John Wiley & Sons, Inc, New York
Health Department Publications

9/65—5M

The Ohio State University cooperating with the U S Department of Agriculture
Cooperative Extension Service, Roy M Kottman, Director, Columbus, Ohio 43210
Printed and distributed in furtherance of Acts of May 8 and June 30, 1914